










Date: Tuesday, 16/12/2008 2:14:47 PM
User: Julie Dawson

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: LONG STEP ASSEMBLY HIGH SKID LH
Job Number	: 44131		
Estimate Number	: 10270		
P.O. Number	:	Part Number	: D350591311
This Issue	: 16/12/2008 S.O. No. :	Drawing Number	: D3272 REV B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : LARGE FAB ASSY	Drawing Revision	: B
Previous Run	: 43399	Material	:
Written By	:	Due Date	: 09/01/2009 Qty: 5-4 Um: Each
Checked & Approved By	: JUD 08.12.16		
Comment	: Est Rev:A 04.03.22 New issue KJ/RF Est Rev:B 07-06-09 Added D3272-1 JLM Est Rev:C 08-04-02 ECN1163 DD verified by:EC Est Rev:D 08-04-08 ECN1164 DD verified by:EC		
Additional Product			
Job Number: 			
Seq. #:	Machine Or Operation:	Description :	
1.0	DC	DOCUMENT CONTROL	
			
Comment: DOCUMENT CONTROL Photocopy bluefile and type labels as per PPP D350-591-311 CHG002			
2.0	D32721	Step	
			
Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s) STEP BATCH: 344055			
3.0	D30671	End Plate	
			
Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s) Pick: Qty Part Number Description Batch 1 D3067-1 End Plate 341447			
4.0	D32191	Plate	
			
Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s) Pick: Qty Part Number Description Batch 2 D3219-1 Support 341449			

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Job Number: 44131

Part Number: D350591311

Job Number:



Seq. #: Machine Or Operation: Description :

5.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod M108037
M109560

3-Grind End Plate flush

PH 09.01.23 5
PH 09.01.23 5
PH 09.01.23 5

6.0 QC9 VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

BE 09-01-23 5

7.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/01/23 (XSLH)

8.0 HAND FINISHING1 HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

PH 09.01.23 5

9.0 QC3 INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

SAD 09-01-23 5

10.0 D3065041 Step Leg Assembly Hi



Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:

Qty Part Number Description Batch
1 D3065-041 Step Leg Assy 342344

PH 09.01.23 5

11.0 D30661 Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s)

Pick:

Qty Part Number Description Batch
2 D3066-1 Spacer 343759

PH 09.01.23 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Job Number: 44131

Part Number: D350591311

Job Number:



Seq. #: Machine Or Operation: Description :

12.0 MS20600AD4W4 Rivets



Comment: Qty.: 16.0000 Each(s)/Unit Total: 64.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

16 MS20600AD4W4

Rivet

M110468 = 308

M110002 = 29

Ph 09.01.23 5

13.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Assemble Leg Assembly as per Dwg D3272.

Leave one rivet out until welding is complete.

Ph 09.01.23 5

14.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

80 07/01/26 (X54H) (X54H)

15.0 D30671 End Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3067-1

End Plate

34/447

Ph 09.01.27 5

16.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel Aft end for welding

2-Inspect for foreign object as per QSI 024

3-Weld Aft End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod m10 803 7

4-Grind End Plate flush

5-Install last rivet as per Dwg.

Ph 09.01.27 5
Ph 09.01.27 5
Ph 09.01.27 5
Ph 09.01.27 5
Ph 09.01.27 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Job Number: 44131

Part Number: D350591311

Job Number:



Seq. #: Machine Or Operation: Description :

17.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

09-01-28

18.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09-01-28

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1
touch up alodine

09-01-28

20.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

12:00

OVEN TEMPERATURE:

320°

FINISH TIME:

12:30

09-01-28

21.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3272 and QSI 005 4.4

109917

09/01/28

22.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: Inspect Powder Coat and Wing Walk

05-07-30

23.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

24.0

D22303

Lug



Comment: Qty.: 4.0000 Each(s)/Unit Total: 16.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 D2230-3 Mounting Lug

43223

09/01/30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 44131

Part Number: D350591311

Job Number:



Seq. #: Machine Or Operation: Description :

25.0 D2618 Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2618

Bushing

42169

SS 09/01/30 X5

26.0 D2856400 Abrasion Strip



Comment: Qty.: 0.6000 f(s)/Unit Total : 2.4000 f(s)

Abrasion Strip

2 x D2856-400-720

42076

SS 09/01/30 X5

27.0 D32351 Mounting Lug



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D3235-1

Mounting Lug

44652

SS 09/01/30 X5

28.0 D3278041 Support Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

1 D3278-041

Support Assembly

44057

SS 09/01/30 X5

29.0 AN335A Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN3-35A

Bolt

M168827

SS 09/01/30 X5

30.0 AN413A Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 32.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 AN4-13A

Bolt

M164746 110322

SS 09/01/30 X5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number: 44131

Part Number: D350591311

Job Number:



Seq. #:	Machine Or Operation:	Description :
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31.0	AN536A	Bolt
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Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN5-36A Bolt

M110363

JS 09/01/30 (S)

32.0	AN960JD10	Washer
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Comment: Qty.: 4.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD10 Washer

M110984

JS 09/01/30 (S)

33.0	AN960JD416	Washer
------	------------	--------



Comment: Qty.: 16.0000 Each(s)/Unit Total : 64.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

16 AN960JD416 Washer

M1110523

JS 09/01/30 (S)

34.0	AN960JD516	Washer
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Comment: Qty.: 4.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD516 Washer

M1109752

JS 09/01/30 (S)

35.0	MS21042L3	Nut
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Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L3 Nut (or -3)

M1109798

JS 09/01/30 (S)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 16/12/2008 2:14:48 PM

User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 44131

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

36.0

MS21042L4

Nut



Comment: Qty.: 8.0000 Each(s)/Unit Total: 32.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 MS21042L4 Nut (or -4)

M169282

SS 09/01/30 KS

37.0

MS21042L5

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L5 Nut (or -5)

M169297

SS 09/01/30 KS

38.0

DSI9410011

Step Modification



Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

Step Modification

44185

Chg 001

SS 09/01/30 KS

39.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

090130 5 LH

40.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-311

Location: 12

Rev D 9/1/30

SP

41.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/02/02

Job Completion



MF 09-01-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>GP</i>	DRAWN BY <i>B</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>H</i>	DRAWING NO. D3272	REV. B SHEET 1 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE NTS
A	04.03.01	NEW ISSUE	
B	07.05.18	D3272-1 WAS D2622-120	

RELEASED

07.06.04 *ff*

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

GENERAL NOTES:

- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

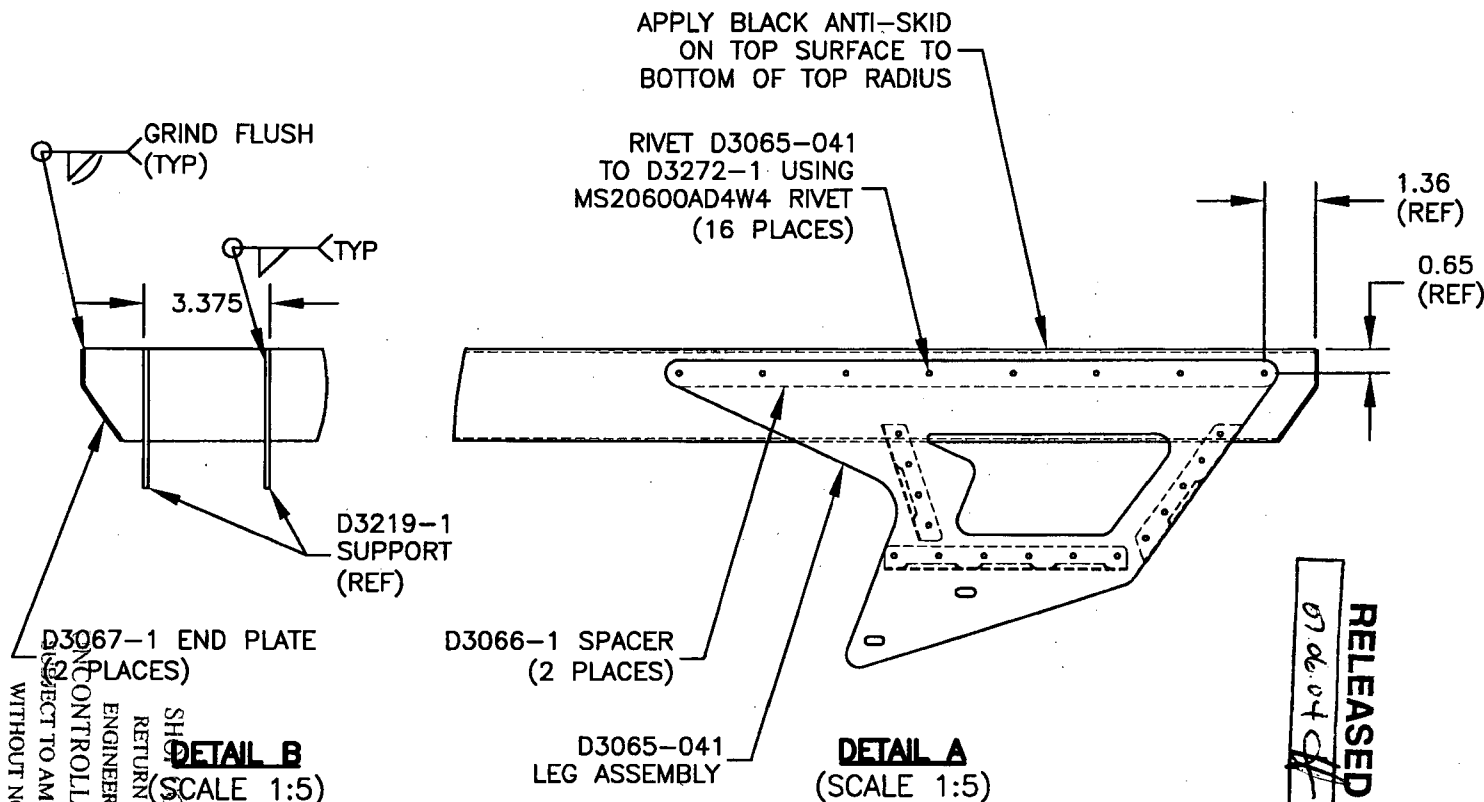
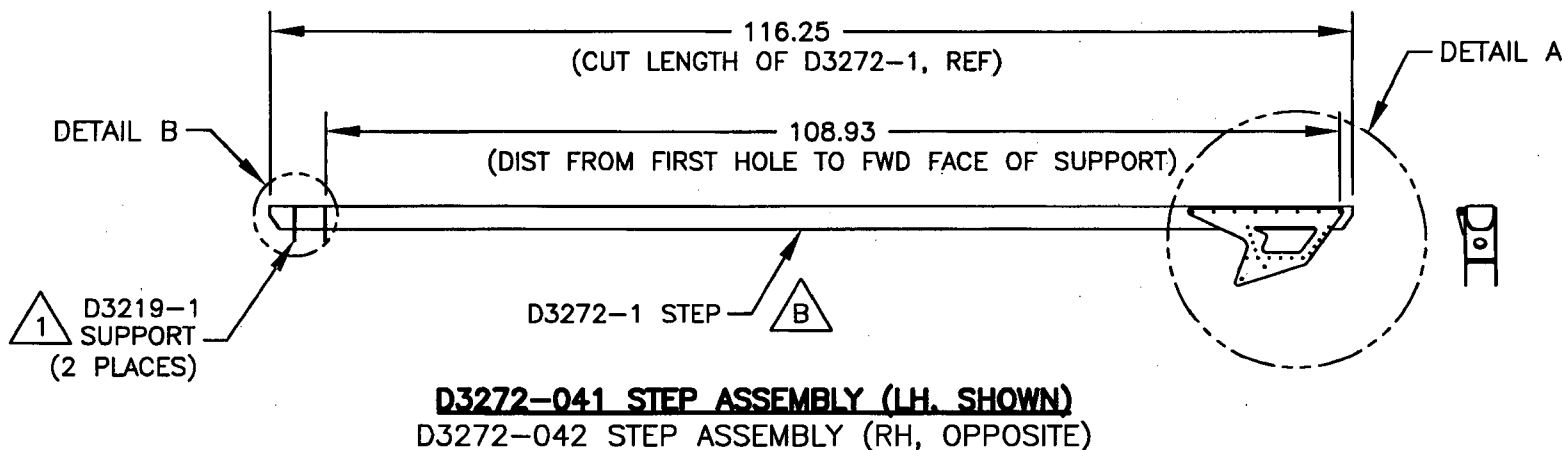
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WORK ORDER
NO. *14131*

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DART

DESIGN	APPROVED	DRAWING NO.	DATE
07.05.18	07.05.18	D3272	07.05.18
STEP ASSEMBLY, HI LONG	SCALE	1:20	
DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA			
REV. B	SHEET 2 OF 3		



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WORK ORDER NO. 4913

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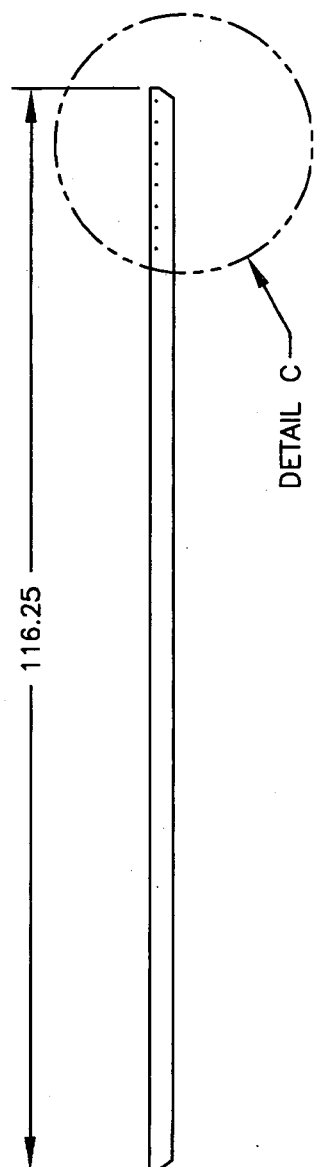
SHOPY RETURN TO ENGINEERING



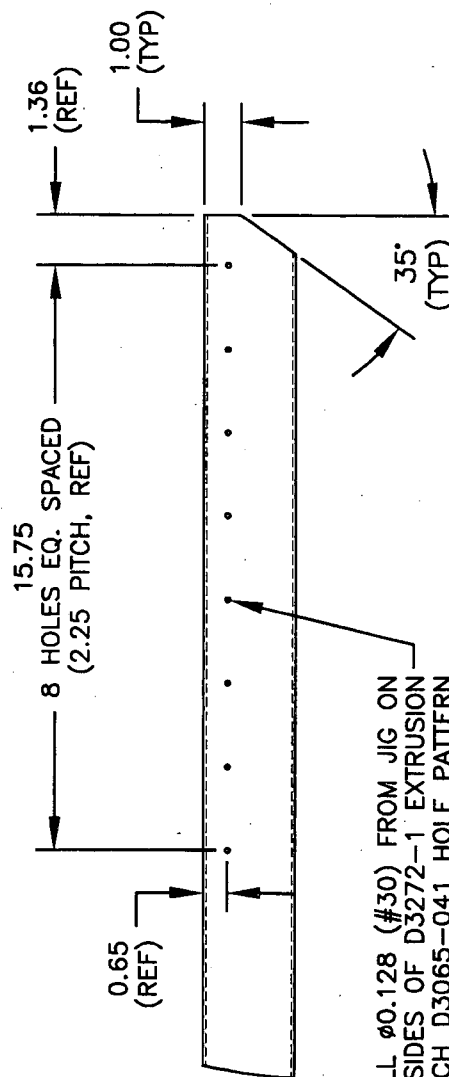
DESIGN <i>qp</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3272	REV. B SHEET 3 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE 1:20

RELEASED

07.06.04 *[Signature]*



DETAIL C
B D3272-1 STEP
(MAKE FROM D2622-120 STEP EXTRUSION)



DETAIL C
(SCALE 1:5)

DRILL $\phi 0.128$ (#30) FROM JIG ON
BOTH SIDES OF D3272-1 EXTRUSION
TO MATCH D3065-041 HOLE PATTERN

SHOP COPY
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